

IN THE CLAIMS:

1-34. (Canceled)

35. (Currently Amended) A polishing apparatus ~~according to claim 33~~, comprising:

a polishing table; and

a work holding plate,

wherein a work held on the holding plate is polished supplying a polishing agent solution, and the polishing table is formed in one-piece by casting, a structure of the polishing table is such that a plurality of recesses and/or a plurality of ribs are provided on a rear surface thereof, a flow path for a temperature adjusting fluid is formed inside for the polishing table, portions in each of which the flow path is not formed act as an internal rib structure, and a value of a thermal expansion coefficient of a material of the polishing table is $5 \times 10^{-6}/^{\circ}\text{C}$ or less and corrosion resistance of the material is almost equal to that of stainless steel.

36. (Canceled)

37. (Previously Presented) A polishing apparatus according to claim 35, wherein the material of the polishing table is invar.

38-40. (Canceled)

41. (Currently Amended) A polishing apparatus according to claim ~~[[33]]~~ 35, wherein temperature changes at any position of a polishing surface of a polishing cloth in polishing action are controlled to 10°C or less by controlling a temperature and/or a flow rate of the polishing agent solution.

42. (Canceled)

43. (Canceled)

44. (Currently Amended) A polishing apparatus according to claim ~~[[33]]~~ 35, wherein rotational unevenness of the polishing table is restricted to 1% or less.

45. (Canceled)

46. (Canceled)

47. (Currently Amended) A polishing apparatus according to claim ~~[[33]]~~ 35, wherein surface displacement in rotation of a polishing surface of the polishing table is restricted to 15 μm or less.

48. (Canceled)

49. (Canceled)

50. (Currently Amended) A polishing apparatus according to claim ~~[[33]]~~ 35, wherein displacement in rotation of a rotary shaft of the polishing plate is table is restricted to 30 μm or less.

51. (Canceled)

52. (Canceled)

53. (Currently Amended) A polishing apparatus ~~according to claim 33, comprising:~~
a polishing table; and
a work holding plate,

wherein a work held on the holding plate is polished supplying a polishing agent solution, and the polishing table is formed in one-piece by casting, a structure of the polishing table is such that a plurality of recesses and/or a plurality of ribs are provided on

a rear surface thereof, a flow path for a temperature adjusting fluid is formed inside for the polishing table, portions in each of which the flow path is not formed act as an internal rib structure, and the work holding plate has recesses or a rib structure formed on a rear surface thereof opposite said working surface.

54. (Canceled)

55. (Canceled)

56. (Previously Presented) A polishing apparatus according to claim 53, wherein a material of the work holding plate is alumina ceramics or SiC.

57. (Canceled)

58. (Canceled)

59. (Previously Presented) A polishing apparatus according to claim 56, wherein a plurality of fine holes for vacuum chucking a work are opened in a region of the work holding plate where the work is adhered.

60-107. (Canceled)